Patent claims:

1. A method for identifying an agent that has an inhibitory effect on the complex-formation of an ARE-containing mRNA and an HuR protein comprising:

(a) providing a soluble form of a HuR protein, with the proviso that a full-length HuR–glutathione-S-transferase fusion protein is excluded,

(b) providing an ARE-containing mRNA,

(c) providing a candidate compound,

wherein at least one of (a), (b) and (c) is labeled,

(d) mixing a) and b) in the presence of (c) and in the absence of (c) for a sufficient period of time so that a) and b) can form a complex,

(e) detecting the amount of complexes formed in step (d) and/or detect the non-complexed mRNA/protein species,

(f) comparing the amount of complexes formed and/or non-complexed mRNA/protein species found in the presence and in the absence of (c), and

(g) choosing an agent which has an influence on the complex formation detected in step (f).

2. The method of claim 1 characterized in that the HuR protein is provided as a homogenous solution.

3. The method of claim 1 or 2 characterized in that HuR is a soluble form of a recombinant full-length protein or a variant or mutant of a soluble form of a full-length protein.

4. The method of any one of claims 1 to 3 characterized in that the mRNA fragment is fluorescently labeled.

5. The method of any one of claims 1 to 4 characterized in that the detection method is a fluorescence spectroscopic method selected from the group consisting of Single Molecule Spectroscopy, Fluorescence Correlation Spectroscopy, Fluorescence Intensity Distribution Analysis, Steady-State Fluorescence Intensity, Fluorescence Anisotropy and Energy Transfer.

6. A screening assay (kit) for identifying an agent that has an inhibitory effect on the complex-formation of an ARE-containing mRNA and an HuR protein comprising as a main component

a) a soluble form of a HuR protein, with the proviso that a full-length HuR–glutathione-S-transferase fusion protein is excluded,

b) an ARE-containing mRNA, and

c) optionally means for detection of the amount of complexes formed between said HuR protein and said ARE-containing mRNA and/or for detection of non-complexed mRNA/protein species.

7. A pharmaceutical composition comprising an agent identified by a method according to claim 1 in association with at least one pharmaceutical excipient.

8. Use of a pharmaceutical composition according to claim 7 for the treatment of a disorder having an etiology associated with the production of a substance selected from the group consisting of cytokine, growth factor, proto-oncogene or a viral protein, preferably the agent is selected from the group consisting of IL-1, IL-2, IL-3, IL-4, IL-8, GM-CSF, TNF-α, VEGF, AT-R1, Cox-2, c-fos and c-myc.

9. A full-length HuR protein of SEQ ID NO:1 or SEQ ID NO:2, wherein the C-terminal amino acid in position 326 is esterified.

10. An isolated RNA sequence motif which is the binding site for HuR.